

LOC Questions and Clarifications Memorandum

To: Solicited Vendors for Letter of Configuration (LOC) Number 38276, dated June 18, 2009 for the Mississippi Secretary of State's Office (SOS)

From: David L. Litchlitter

Date: June 29, 2009

Subject: Responses to Questions Submitted and Clarifications to Specifications

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The following questions were submitted to ITS and are being presented as they were submitted, except to remove any reference to a specific vendor. This information should assist you in formulating your response.

Question 1: Is the intent of item 6.1 for the vendor to quote the cost having a certified SAN Architect transfer data from SOS's existing servers to the new SAN? If so, should this cost be included in the base total cost or priced as an option.

Response: **The quote should include the cost of having a certified SAN Architect transfer all data from the servers to the new SAN. The cost should be listed as an option.**

Question 2: Is the intent of Item 6.1 for the vendor to also quote as an option, the hourly cost (1 hour minimum with no travel charges) for a local certified SAN Architect to provide any "out of scope" services for a period of one year after the initial installation?

Response: **SOS does not require optional out-of-scope services.**

Question 3: Specification 5.1.1 addresses expansion capability. In light of SOS's ultimate desire to expand its SAN capacity to include a Disaster Recover array at University of Mississippi or elsewhere, should the storage array be able to support (as a potential future extra cost option) Continuous Asynchronous Replication to a

DR Location instead of buffering at Primary Location for increased recovery time objective?

Response: SOS does not require Continuous Asynchronous Replication.

Question 4: Is the intent of Specifications 5.1.3 and 5.1.4 to have redundant paths to each drive shelf from each array controller?

Response: SOS does require redundant paths to each drive shelf from each array controller.

Question 5: Is the intent of Specification 5.1.1 for the SAN to have the capacity to more than double the initial 8TB of storage using 450GB 15K Fibre Channel drives, but that the SAN also have the capacity to support (in the same array) inexpensive 1TB FATA drives (for near line backups, snap clones, etc.)?

Response: The SAN should have the capacity to more than double the initial 8TB of storage, as well as to support 1TB FATA drives.

Question 6: Is the intent of Specification 5.1.12 (in addition to the text already stated in that spec) for vendors to provide an unlimited license-to-use (LTU) of a business copy software product that will allow the SAN to do more than 12 space efficient snapshots per source volume without pre-allocating space, to do snap-clones, etc.? Note that the reference to “unlimited” in this question means that additional license fees don’t have to be paid as additional terabytes of storage are added.

Response: Vendors should provide an unlimited LTU of a business copy software product that will allow the SAN to do more than 12 snapshots per source volume, do snap-clones, and create, copy, and mirror virtual disk volumes.

Question 7: Is the intent of Specification 5.1.13 regarding “virtual disks” and “RAID 5” for the array to be able stripe data on more than 30 disks in a single virtualization disk group for optimal performance and to do Raid 5 parity calculations in hardware to provide consistent performance?

Response: The array should be able to stripe data on more than 30 disks in a single virtualization disk group and do Raid 5 parity calculations.

LOC responses are due July 7, 2009, at 3:00 p.m. (Central Time).

If you have any questions concerning the information above or if we can be of further assistance, please contact Teresa Washington at 601-359-2383 or via email at teresa.washington@its.ms.gov.

cc: File 38276